DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



No

Contract #: 04-0120F4

Cty: SF/Ala Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-008500 Address: 333 Burma Road **Date Inspected:** 12-Aug-2009

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 1900 **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Wang Chuan Qing, An Qing Xian (Wb) Paisento Yes No Yes N/A Yes **Inspected CWI report:** No **Rod Oven in Use:** No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes N/A

Delayed / Cancelled:

34-0006 **Bridge No: Component:** Tower Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 10

This QA Inspector, George Goulet, also randomly observed the following work in progress in Bay 10:

SMAW welding of weld joints SSD1-FESA4-1D/F-3, 12 located on south tower. Welder was identified as 053829. ZPMC QC was identified as CWI Wang Chuan Qing (QC1). The welding variables recorded by QC1 appeared to comply with WPS-345+485-SMAW-2G(2F)-repair-2. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Zhang Qin Jian.

Bay 11

This QA Inspector, George Goulet, randomly observed the following work in progress in Bay 11:

SMAW welding of weld joints ESD1-FESA4-D/F-7, 18 located on east tower. Welder was identified as 053829. ZPMC QC was identified as CWI An Qing Xiang (QC2). Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Cao Cheng, who was not a CWI. The welding variables recorded by QC2 and QC2's assistant appeared to comply with WPS-345+485-SMAW-2G(2F)-repair-2. Also at this location and appearing to be monitoring the welding and

recording data was ABF Representative Wang Jiang Hua.

WELDING INSPECTION REPORT

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SMAW welding of weld joint WD1-A6001-5-7B located on west tower. Welder was identified as 040611. ZPMC QC was identified as CWI You Qi Guo (QC3). Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Ma Qian Li, who was not a CWI. The welding variables recorded by QC3 and QC3's assistant appeared to comply with WPS-B-T-4114. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Xia Yan.

FCAW buttering welding of the ends of P1144-E2, C2, C5, C6 located on east tower. Welder was identified as 068858. ZPMC QC was identified as QC3. The welding variables recorded by QC3 appeared to comply with WPS-345-FCAW-2G(2F)-repair. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Xie Yan.

FCAW buttering welding of the ends of P1144-E2, C3, C4, C5 located on east tower. Welder was identified as 068206. ZPMC QC was identified as QC3. The welding variables recorded by QC3 appeared to comply with WPS-345-FCAW-2G(2F)-repair. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Xie Yan.

FCAW buttering welding of the ends of P1144-D3, C3, C4 and P1233-C2 located on east tower. Welder was identified as 065923. ZPMC QC was identified as QC3. The welding variables recorded by QC3 appeared to comply with WPS-345-FCAW-2G(2F)-repair. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Xie Yan.

SMAW tack welding of weld joint ESTL-2J/L-101 located on diaphragm 139M at skin A on east tower. Welder was identified as 203793. ZPMC QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Mao Bin Bin, who was not a CWI. The welding variables recorded by QC3 and QC3's assistant appeared to comply with WPS-B-T-4312Tc-P5.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

As noted above, and this QA Inspector, George Goulet, asked each QC monitoring the welding if all the welding variables observed by QC appeared to comply with the appropriate WPS, including the preheat requirements according to thickness of the thickest member being welded. Each QC showed this QA Inspector, George Goulet, that QC was carrying the proper temperature sticks to monitor the minimum and maximum preheat and interpass temperatures and replied that all QC observed did appear to comply.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod, 134-8257-0045, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer